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Case Report

Carcinosarcoma of the vulva: a rare case report

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ABSTRACT

Carcinosarcomas are rare and clinically aggressive neoplasms with poor outcome. A very few cases has been reported in the literature. We present a case of a 54 yrs woman with bleeding per vagina for 1.5 months. On per vaginal examination, a lump of size 3×2 cm was found over the left anterior region of vulva. CECT abdomen revealed a well-defined heterogeneously enhancing lesion with calcific foci involving both labia minora. MRI pelvis reveals carcinoma left vulva with involvement of lower 3rd of vaginal wall. Histopathological examination showed features suggestive of carcinosarcoma of the vulva. This was further confirmed by immunohistochemistry which showed positivity for CK, SMA, caldesmon and negative for S100, CD34, desmin, CD31, ERG and MyoD1. Because it is a very rare tumor with severe prognosis, we presented this case as this case report can be a useful addition to the literature.

Keywords: Vulva, Carcinosarcoma, Sarcoma

INTRODUCTION

Carcinosarcoma, a tumor of the vulva with sarcomatoid features, is an extremely rare and aggressive tumor. It is a tumor in which two components are recognizable: a squamous cell carcinoma and a sarcomatoid tumor. Although its incidence is not well established, it may account for 1%.[1] This case reports a patient with a diagnosis of vulvar carcinosarcoma that has been treated with radical vulvectomy and bilateral inguinal lymphadenectomy but later the patient died after few months because it is a progressive disease with poor outcome.

CASE REPORT

We presented a case of a 54 years old woman with bleeding per vagina for 1.5 months. On per vaginal examination, a lump of size 3×2 cm was found over the left anterior region of vulva. CECT abdomen revealed a well-defined heterogeneously enhancing lesion with calcific foci involving both labia minora. MRI pelvis reveals carcinoma left vulva with involvement of lower 3rd of vaginal wall. Incisional biopsy from vulva revealed carcinosarcoma of the vulva. The patient underwent vulvectomy and bilateral inguinal lymph node dissection. Histopathological examination and Immunohistochemistry was performed thereafter.

Histopathological examination from vulval lesion show nests and scattered malignant cells with high nucleocytoplasmic ratio and hyperchromatic nuclear features and stroma showing malignant sarcomatous change (Figure 1 and 2). Immunohistochemistry showed positivity for CK, SMA (Figure 3), Caldesmon and negative for S100, CD34, Desmin, CD31, ERG and MyoD1. Ki67 (MIB-1) was found to be 50% (Figure 4).

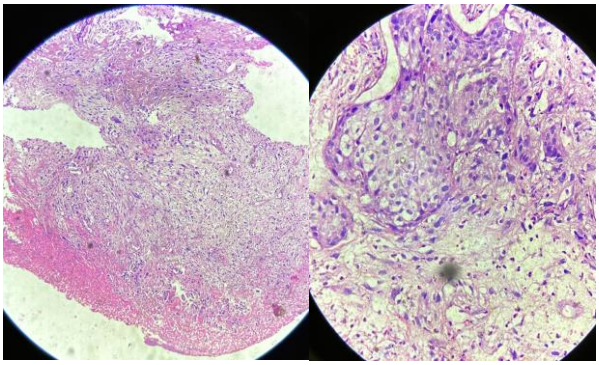

Figure 1: Photomicrographic image from incisional biopsy of vulva showing carcinomatous and sarcomatous component.

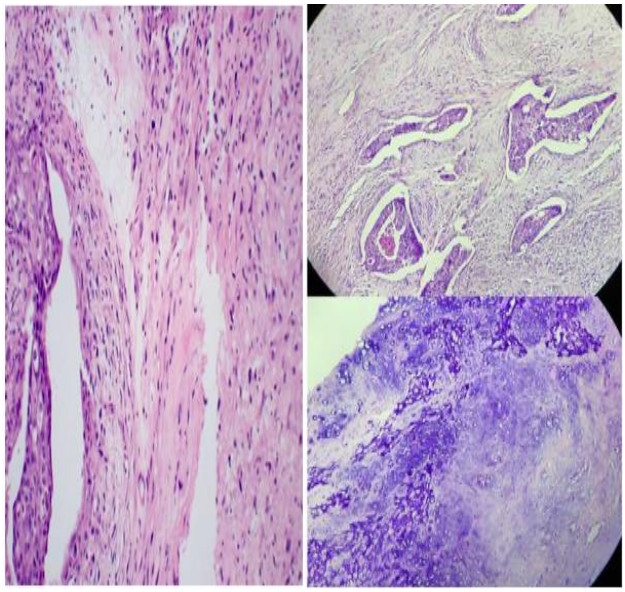

Figure 2: Carcinomatous component consists of round to oval cells hyperchromatic nuclei and indistinct cell borders. Sarcomatous component consists of predominant spindle cells with dense hyperchromatic nuclei and inconspicuous nucleoli. Focal areas showing osteoid differentiation.

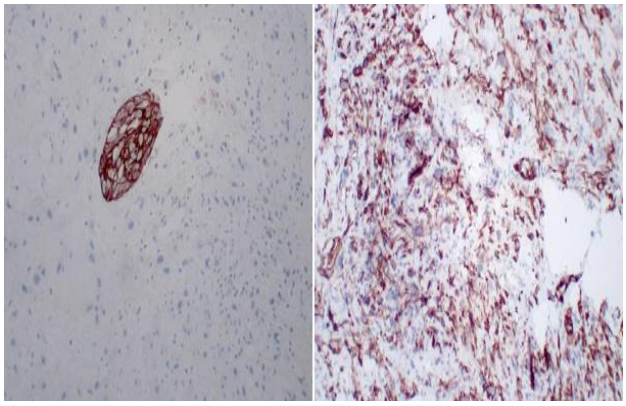

Figure 3: Carcinomatous component- CK (AE1/AE2) positive and sarcomatous component- SMA positive.

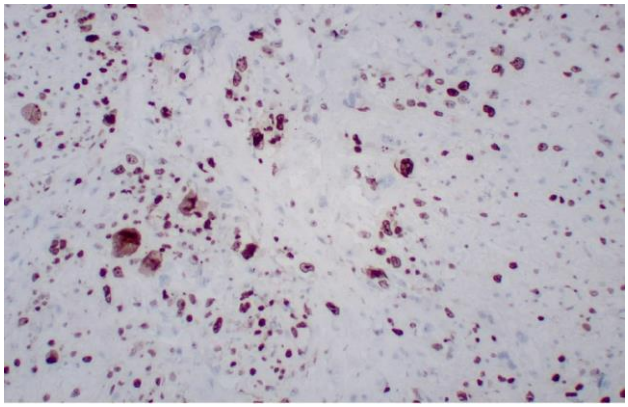

Figure 4: Ki67 (MIB-1)- 50%.

Thus, the diagnosis of carcinosarcoma was made from HPE findings. Thus, the diagnosis of carcinosarcoma was confirmed by IHC.

DISCUSSION

Carcinosarcoma is a well-recognized tumor even if it is an uncommon entity. These neoplasms have rarely been documented in the female genital tract and occurs most commonly in the oral cavity, pharynx, esophagus, larynx and skin.[2-5] Some of these tumors have been thought to be related to previous radiotherapy for benign or malignant conditions.[6] The differential diagnosis which can be considered for carcinosarcoma of the vulva includes amelanotic malignant melanoma and true sarcoma.

On HPE, both carcinomatous and sarcomatous features are found. Carcinomatous component is positive for CK and Sarcomatous component is positive for SMA, Caldesmon and negative for S100, CD34, Desmin, CD31, ERG and MyoD1.

CONCLUSION

Vulvar carcinosarcomas are poorly characterized tumors which are very aggressive and has a worse outcome. A multidisciplinary approach should be undertaken for management and treatment of the tumor since it is very rare with poor outcome.

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